

GROUP: WATERSHED IMPROVEMENT

MEASURE: NUMBER OF WATERSHED UNITS FOR WHICH IMPROVEMENTS IN WATER QUALITY USING WATERSHED APPROACH WERE DOCUMENTED

KEY STATISTICS FOR FY 2009-10

NUMBER OF WATERSHED UNITS IMPROVED: 3

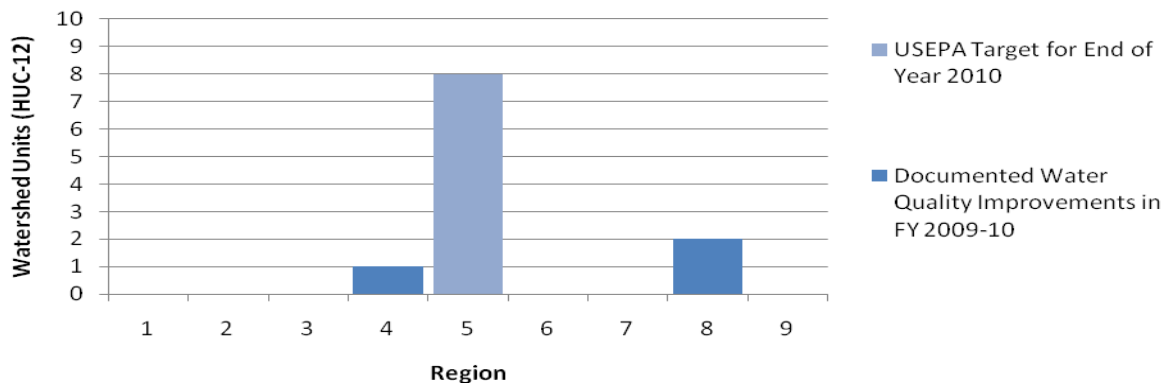
MESSAGE: Water quality improvements were documented in three watershed units in FY 2009-10 and are expected in eight additional watershed units by the end of 2010.

MEASUREMENTS:

Region	Watersheds of Focus	Pollutants Monitored	Watershed Units (HUC-12) Improved in FY 2009-10	Watershed Units (HUC-12) Expected to Be Improved by End of 2010
1	4	2	0	0
2	2	2	0	0
3	3	3	0	0
4	3	3	1	0
5	3	2	0	8
6	2	2	0	0
7	1	1	0	0
8	2	2	2	0
9	3	5	0	0
TOTAL	23	22	3	8

[Click here for table details.](#)

Watershed Units With Documented Water Quality Improvements - 2010



WHAT THE MEASURE IS SHOWING:

The Water Boards have identified 23 impaired watersheds to track progress and document improvements in water quality conditions using a watershed approach related to a key national performance measure in the U.S. Environmental Protection Agency’s (USEPA) [2006-2011 Strategic Plan](#), the Watershed Improvement Measure (also known as [SP-12](#) or “[Measure W](#)”). These “watersheds of focus” are of varying sizes, and most include multiple watersheds defined by 12-digit Hydrologic Unit Codes (HUC-12). Additional watersheds may be added and/or

substituted. For FY 2009-10, watershed-wide improvements, and descriptions of the watershed approaches implemented to achieve the water quality improvements, were documented in watershed improvement reports for two of California's 23 watersheds of focus: (1) the [Calleguas Creek watershed](#) in Region 4 (Los Angeles Regional Water Board) for water quality impairments in one watershed unit due to ammonia, and (2) the [Newport Bay watershed](#) in Region 8 (Santa Ana Regional Water Board) for water quality impairments in two watershed units due to nutrients. Work continues in the remaining watersheds to improve water quality in a number of watershed units (watershed units reported as zero in the table indicate that watershed improvement activities are in progress). California's documented water quality improvements in watershed units are counted toward USEPA's national goal of improving water quality conditions in 250 impaired watersheds by 2012.

WHY THIS MEASURE IS IMPORTANT:

California has over 700 water bodies that do not meet one or more water quality standards. These impaired water bodies, which are identified on the federal [Clean Water Act Section 303\(d\)](#) list for the State, are subject to the development of Total Maximum Daily Loads (TMDLs), and a variety of water quality improvement and restoration activities. Experience has shown that, to solve these problems, TMDLs and watershed plans are needed to analyze and quantify the specific causes and sources of water quality problems, identify measurable water quality goals, and implement specific actions to improve water quality. Furthermore, effective watershed management includes public and private entities collaborating within a watershed to protect our waters and other resources of community concern. The California Water Boards and the USEPA agreed to track and report progress on the "watersheds of focus" to model and demonstrate the effectiveness of the watershed approach to improving water quality. These efforts will enhance water quality improvement activities through better identifying needs, targeting activities, and sharing information.

TECHNICAL CONSIDERATIONS:

- **Data Source:** State Water Board's Nonpoint Source Program. Period: July 1, 2009-June 30, 2010. Extracted on August 2, 2010.
- **Unit of Measure:** Number of impaired watershed units (defined as 12-digit HUCs) for which documented improvements in water quality in "watersheds of focus" occurred using the watershed approach.
- **Data Definitions:** *Watersheds of focus:* The specific watersheds identified by the Water Boards and USEPA for purposes of tracking and documenting progress in improving water quality conditions using the watershed approach. *Pollutants monitored:* The water quality parameters (e.g., sediment, nutrients, bacteria) being tracked for determining improvements in water quality conditions in watersheds of focus. *Watershed units improved:* Per USEPA guidance, as improvements in water quality are documented in watershed improvement reports, the number of watershed units improved (defined as 12-digit HUCs) are reported. Because the State's Fiscal Year (FY) 2009-10 is July 1, 2009-June 30, 2010, and the federal Fiscal Year 2010 is October 1, 2009-September 30, 2010, the expected number of watershed units improved are provided for end of year 2010.

- **References:** More information on the “Watershed Improvement Measure” (also known as SP-12, or Measure W): <http://www.epa.gov/region9/water/watershed/>. USEPA Guidance on SP-12: http://www.epa.gov/region9/water/watershed/docs/SP-12_Guidance_12-05-08.pdf.

GLOSSARY:

Hydrologic Unit Code (HUC)

The hydrologic unit code (HUC) is the “address” of the watershed. The HUC is the numerical code of the USGS watershed classification system used to identify the watersheds, or drainage basins, at various scales. The HUC organizes watersheds by a nested size hierarchy, so large scale watershed boundaries for an entire region may be assigned a two-digit HUC, while small scale, local watershed boundaries (within the larger regional watershed) may be assigned a 12-digit HUC. Although the watershed boundaries for this measure are those established at the “12-digit HUC” scale, which averages 22 square miles in size, the watershed approach can be applied at any appropriate scale, including scales smaller or larger than HUC-12 watersheds. For more information: <http://www.epa.gov/watershed/address-x.html>

Impaired Water Bodies/Watersheds

Impaired water bodies are those that are not supporting one or more of their beneficial uses designated in water quality standards. For the purpose of this measure, “impaired water bodies” are those identified by the State and USEPA in [2002](#) (which is used as a baseline for this measure). For the purpose of this measure, an “impaired watershed” is a watershed containing one or more impaired water bodies

Improved (Water Quality Conditions in Impaired Watershed)

For the purpose of this measure, “improved” means either that: (1) one or more of the impairment causes identified in the [2002 303\(d\) list](#) are removed for at least 40 percent of the impaired water bodies or impaired miles or acres in the watershed; or (2) there is significant watershed-wide improvement, as demonstrated by valid scientific information, in one or more water quality parameters or related indicators associated with the impairments. For more information, see USEPA’s Guidance for Reporting Watershed Improvement under Measure SP-12 – FY 2009: http://www.epa.gov/region9/water/watershed/docs/SP-12_Guidance_12-05-08.pdf

Total Maximum Daily Load (TMDL)

A TMDL is a calculation of the maximum amount of a pollutant that a water body can receive and still safely meet water quality standards. TMDLs are required for impaired water bodies on the federal Clean Water Act Section 303(d) list.

Watershed Approach

A watershed approach is a coordinating process for focusing on water resource problems within a watershed that: (1) is focused on hydrologically defined areas, (2) involves key stakeholders, (3) uses an iterative planning or adaptive management process to address priority water resource goals, and (4) uses an integrated set of tools and programs. For more information:

<http://www.epa.gov/owow/watershed/approach.html>.

Detailed Table of Watershed Improvement Measure

Improvements in Impaired ¹ Watersheds of Focus [USEPA Measure SP-12]			
Region	Watersheds of Focus	Pollutants Monitored	Results in FY 2009-10 (per USEPA Guidance)
1	Garcia River	Sediment	Tracking in progress
1	Shasta River	Sediment, temperature	Tracking in progress
1	Scott River • French Creek • Moffett Creek)	Sediment	Tracking in progress
1	Terwar Creek	Sediment	Tracking in progress
2	Tomales Bay	Bacteria	Tracking in progress
2	Napa River	Sediment	Tracking in progress
3	San Lorenzo River	Pathogens, sediment, nutrients	Tracking in progress
	Morro Bay Watershed • Chorro Creek • Warden/Los Osos Creek	Sediment, nutrients	Tracking in progress
3	Oso Flaco Creek	Nutrients	Tracking in progress
4	Calleguas Creek	Nutrients, sediment, ammonia	Final ammonia report (1 watershed unit)
4	Santa Clara River	Ammonia	Tracking in progress
4	Los Angeles River	Ammonia	Tracking in progress
5	Feather/Sacramento Rivers	Diazinon	Draft diazinon report
5	Sacramento urban creeks	Diazinon	Tracking in progress
5	Grasslands & Salt Slough	Selenium	Draft selenium report
6	Lake Tahoe	Sediment, nutrients	Tracking in progress
6	Upper Truckee River • Big Meadow Creek	Pathogens	Tracking in progress
7	New River	Bacteria	Tracking in progress
8	Newport Bay	Nutrients	Final nutrient report (2 watershed units)
8	San Diego Creek	Diazinon, chlorpyrifos	Tracking in progress
9	Tijuana River	Trash	Tracking in progress
9	Chollas Creek	Metals, bacteria, diazinon	Tracking in progress
9	San Diego beaches	Pathogens	Tracking in progress

1 Based on 2002 list of impaired water bodies, adopted per federal Clean Water Act Section 303(d).

[Click here for California map showing locations of “watersheds of focus”.](#)